

IN THE CLAIMS:

Please amend the claims as follows. All of the claims are included for the Examiner's convenience.

a 1. (Once amended) A method of encoding a video data stream, the method [information,] comprising the steps of:
[receiving the video information;
identifying an element of the video information;
assigning a priority to the element; and
encoding the video information into a bitstream, including an indication of the priority of the element.]

identifying video objects from a video data stream;
coding each video object as video object layer data and video object plane data;
assigning a priority to the video object layer data of each video object;
encoding the video object layer data, the video object plane data and the priority data in a bitstream.

2. (Once amended) The method of claim 1, wherein said step of encoding is performed to encode the video information into [a] the bitstream for low bitrate transmission.

n.e. 3. (Unchanged) The method of claim 1, wherein said step of encoding is performed according to the MPEG-4 standard.

4. (Once amended) The method claim 1, wherein [the element is a visual object] the bitstream is output to a channel and the priority data identifies which video object layer data may be discarded in the event of channel congestion.

5. (Once amended) The method of claim 1, wherein [the element is a video object layer] the bitstream is output to a channel and the priority data identifies which video object layer data may be discarded in the event of loss of channel bandwidth.

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6. (Once amended) The method of claim 1, wherein [the element is a video object plane] the bitstream is output to a channel and the priority data identifies which video object layer data may be discarded in the event of channel errors.

7. (Once amended) The method of claim 1, wherein the [element is a keyregion] and the priority data identifies which video object layer data may be discarded in the event of limited memory or processor resources.

8. (Once amended) The method of claim 1, wherein said step of assigning a priority to the [element, and including the indication of the priority of the element in the encoded bitstream,] video object layer data of each video object is optional.

9. (Once amended) The method of claim 1, wherein the bitstream is a visual bitstream and the [indication of the priority of the element] assigned priorities of video object layer data is carried by a specific codeword in the visual bitstream.

10. (Once amended) The method of claim 1, wherein the bitstream is a systems bitstream and [the indication of the priority of the element is] the assigned priorities of video object layer data are included as part of an object descriptor in the systems bitstream.

11. (Once amended) The method of claim 1, wherein said step of assigning a priority is performed based on the importance of the information contained in the [element] video object layer data.

12. (Once amended) The method of claim 1, wherein said step of encoding is performed for [elements] video object layer data having a high priority before being performed for [elements] video object layer data having a low priority.

13. (Once amended) The method of claim 1, wherein said step of encoding is not

performed for [elements] video object layer data having a low priority.

14. (Once amended) The method of claim 1, further comprising the step of:
transmitting the bitstream, wherein information related to [elements] video object layer data having a high priority is transmitted before information related to [elements] video object layer data having a low priority.

15. (Once amended) A method of decoding an encoded bitstream, comprising the steps of:

receiving [the] an encoded bitstream, the encoded bitstream containing video object layer data and video object plane data corresponding to a video object, the video object identified from a video data stream;

identifying a first [element] video object layer and a second [element] video object layer in the encoded bitstream, the first [element] video object layer having a first priority and the second [element] video object layer having a second priority lower than the first priority;
and

decoding the first [element] video object layer to reconstruct video information contained in the bitstream.

16. (Canceled) The method claim 15, wherein the first and second elements are visual objects.

17. (Canceled) The method of claim 15, wherein the first and second elements are video object layers.

18. (Canceled) The method of claim 15, wherein the first and second elements are video object planes.

19. (Canceled) The method of claim 15, wherein the first and second elements are keyregions.

Q3 20. (Once amended) The method of claim 15, wherein the bitstream is a visual bitstream and [the] an indication of the priority of [the element] each of the first and second video object layers is carried by a specific codeword in the visual bitstream.

21. (Once amended) The method of claim 15, wherein the bitstream is a systems bitstream and [the] an indication of the priority of [the element] each of the first and second video object layers is included as part of an object descriptor in the systems bitstream.

22. (Once amended) The method of claim 15, further comprising the step of: decoding the second [element] video object layer to reconstruct video information contained in the bitstream.

23. (Canceled) A bitstream representing video information, the bitstream produced by the process of:
[receiving the video information;
identifying an element of the video information;
assigning a priority to the element; and
generating data representative of the video information, including an indication of the priority of the element.]
identifying video object layers from a video data stream;
encoding the video object layers into a bitstream; and
encoding a priority associated with each of the encoded video object layers into the bitstream.

Q4 24. (Once amended) An apparatus for encoding video information, comprising:
an input port configured to receive the video information;
an encoding unit coupled to said input port, said encoding unit being configured to identify [an element] video objects from a stream of video data from the video information, code each video object as video object layer data and video object plane data [of the video information], assign a priority to the [element] video object layer data of each video object,

04 and encode the video information into a bitstream, including [an indication of] the assigned priority of the element; and

an output port coupled to said encoding unit, said output port being configured to output the encoded bitstream.

25. (Once amended) An apparatus for decoding an encoded bitstream, comprising:
an input port configured to receive an encoded bitstream, the encoded bitstream containing video object layer data and video object plane data corresponding to a video object, the video object identified from a video data stream;

a decoding unit coupled to said input port, said decoding unit being configured to identify a first [element] video object layer and a second [element] video object layer in the encoded bitstream, the first [element] video object layer having a first priority and the second [element] video object layer having a second priority lower than the first priority, and decode the first [element] video object layer to reconstruct video information contained in the encoded bitstream; and

an output port coupled to said decoding unit, said output port being configured to output the reconstructed video information.

26. (Once amended) A medium that stores instructions adapted to be executed by a processor to perform the steps of:

[receiving information to be encoded;

identifying an element of the video information;

assigning a priority to the element; and

encoding the video information into a bitstream, including an indication of the priority of the element]

identifying video objects from a video data stream;

coding each video object as video object layer data and video object plane data;

assigning a priority to the video object layer data of each video object;

encoding the video object layer data, the video object plane data and the priority data in a bitstream.